## California Department of Public Health Radiation Monitoring Report June 21, 2011

AIR: California Department of Public Health (CDPH) air monitors detected only trace amounts of radiation following the nuclear emergency in Japan. At the end of April 2011, CDPH resumed its routine weekly sampling schedule and analyses. Air samples collected from Eureka, Humboldt Bay, Richmond, Livermore, Avila Beach, San Luis Obispo, Los Angeles, San Clemente, and San Diego from April 27 to June 8, 2011 did not detect any lodine-131.

We are exposed to radiation every day, both from natural sources, such as minerals in the ground or radiation from the sun, and from man-made sources such as medical x-rays. The average annual radiation dose per person in the U.S. is 620 millirem.

Sample Station	Date Collected	lodine–131 Results (picoCuries per cubic meter of air)	Estimated Radiation Dose per Year (millirem)	
Eureka	5/9/11	No Detection	· · · · · ·	
	5/16/11	No Detection		
	5/23/11	No Detection		
	5/31/11	No Detection		
	6/6/11	No Detection		
Humboldt Bay	5/9/11	No Detection		
	5/14/11	No Detection		
	5/23/11	No Detection		
	5/30/11	No Detection		
	6/5/11	No Detection		
Richmond	5/4/11	No Detection		
	5/10/11	No Detection		
	5/18/11	No Detection		
	5/25/11	No Detection		
	6/1/11	No Detection		
	6/8/11	No Detection		
Livermore	5/12/11	No Detection		
	5/17/11	No Detection		
	5/24/11	No Detection		
	5/31/11	No Detection		
	6/8/11	No Detection		
Avila Beach San Luis Obispo	5/6/11	No Detection		
	5/13/11	No Detection		
	5/20/11	No Detection		
	5/27/11	No Detection		
	6/3/11	No Detection		
	5/6/11	No Detection		
	5/13/11	No Detection		
	5/20/11	No Detection		
	5/27/11	No Detection		
	6/3/11	No Detection		
Los Angeles	4/27/11	No Detection		
	5/9/11	No Detection		
	5/16/11	No Detection		
	5/23/11	No Detection		
	5/31/11	No Detection		
	6/7/11	No Detection		
San Clemente	5/9/11	No Detection		
	5/16/11	No Detection		
	5/23/11	No Detection		
	6/1/11	No Detection		
	6/6/11	No Detection		
San Diego	5/4/11	No Detection		
	5/11/11	No Detection		
	5/19/11	No Detection		
	5/25/11	No Detection		
	6/2/11	No Detection		

Milk: Trace amounts of radiation were detected in milk sampled from the San Luis Obispo area.

Sample Station	Date Collected	Results	Element Detected	Concentration Measured (pCi/Liter)	Estimated Dose (millirem/week)
CalPoly Dairy Farm	6/14/2011	Detection of:	Cesium-134	2.37	0.002
			Cesium-137	2.95	0.001

The Cesium-134 concentration in the milk sample is 1,960 times less than standard of the US FDA (4,645 pCi/liter of milk). The resultant dose is approximately 0.002 millirem per week. The Cesium-137 concentration in the milk sample is 1,575 times less than standard of the US FDA (4,645 pCi/liter of milk). The resultant dose is approximately 0.001 millirem per week.

## Notes:

CDPH has air sampling stations in nine locations in California. Samples collected from these stations are analyzed for radioactive elements including Barium-140, Cerium-141, Cerium-144, Cesium-134, Cesium-137, Iodine-132, Ruthenium-103, Ruthenium-106, Tellurium-132, and Zirconium-95.

Estimated dose is calculated by methods described in Title 10 of the Code of Federal Regulations Part 20, Standards for Protection Against Radiation, Appendix B, Table 2. Dose values for each radionuclide assume the individual will be exposed at this concentration continuously over the course of a year. Information to date indicates that the duration of exposure should not exceed a few weeks.

Link to laboratory reports CLICK HERE

Link to map showing sampling station: CLICK HERE